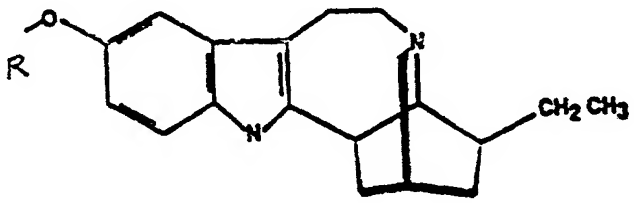
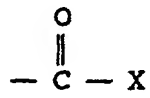
WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS PATENT OF THE UNITED STATES IS:

1. An essentially pure noribogaine compound having the formula:



wherein R is hydrogen or a hydrolyzable group of the formula:



wherein X is an unsubstituted C_1-C_{12} group or a C_1-C_{12} group substituted by lower alkyl or lower alkoxy groups, wherein said noribogaine compound having said hydrolyzable group hydrolyses in vivo to form 12-hydroxy ibogamine.

2. The noribogaine compound of Claim 1, wherein X is C_1-C_6 group.

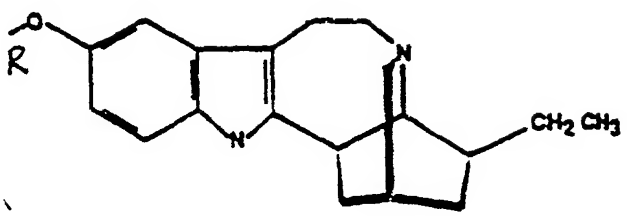
3. The noribogaine compound of Claim 2, wherein X is methyl or ethyl.

4. The noribogaine compound of Claim 1, wherein R is benzoyl.

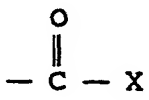
5. The noribogaine compound of Claim 1, wherein R is hydrogen.

6. A pharmaceutical composition for treating chemical dependency in a mammal, which comprises:

a) an amount of one or more noribogaine compounds having the formula:



wherein R is hydrogen or a hydrolyzable group of the formula:



wherein X is an unsubstituted C_1-C_{12} group or a C_1-C_{12} group substituted by lower alkyl or lower alkoxy groups, effective to reduce craving for a chemical substance in said mammal, thereby treating the chemical dependency, and

b) a pharmaceutically acceptable excipient.

7. The pharmaceutical composition of Claim 6, wherein in said noribogaine compound, X is C_1-C_6 group.

8. The pharmaceutical composition of Claim 7, wherein X is methyl or ethyl.

9. The pharmaceutical composition of Claim 6, wherein R is benzoyl.

10. The pharmaceutical composition of Claim 6, wherein said R is hydrogen.

11. A method of treating chemical dependency in a mammal, which comprises administering to said mammal an amount of the noribogaine compound of Claim 1 or the pharmaceutical composition of Claim 6 effective to treat said chemical dependency.

12. The method of Claim 11, wherein said mammal is human.

13. The method of Claim 11, wherein said chemical dependency is to a substance selected from the group consisting of heroin, cocaine, alcohol, nicotine, amphetamine, methamphetamine, opium, methadone, hycodan, morphine and caffeine.

14. The method of Claim 11, wherein said noribogaine compound is 12-hydroxy ibogamine.

15. A method of treating addiction to a drug in a mammal in need thereof, which comprises administering to said mammal an amount of the noribogaine compound of Claim 1 or the pharmaceutical composition of Claim 6 effective to reduce craving or withdrawal symptoms or both for said drug.

16. The method of Claim 15, wherein said mammal is human.

17. The method of Claim 15, wherein said drug is selected from the group consisting of heroin, cocaine, methamphetamine, opium, methadone, hycodan, morphine, amphetamine, alcohol, caffeine and nicotine.

18. The method of Claim 15, wherein withdrawal symptoms from the drug are reduced.